

FINDING OF NO SIGNIFICANT IMPACT

Proposed Hopi Arsenic Mitigation Project

The U.S. Department of Health and Human Services, Phoenix Area Indian Health Service (IHS) and the Hopi Tribe (Tribe) propose to construct the Hopi Arsenic Mitigation water supply project (HAMP) on the Hopi Reservation, located in Navajo County, Arizona. The Tribe or a Tribal operating utility will own and operate the HAMP to provide drinking water to First and Second Mesa villages. First Mesa villages include Walpi, Tewa, Sichomovi and Polacca. Second Mesa villages include Sipaulovi, Mishongovi, and Shungopavi. Water supply facilities proposed would be separate but connected to the existing village water systems. The HAMP regional transmission mains would connect to the village water storage tanks, and the villages would continue to maintain ownership and operate their respective village water and sewer systems.

The purpose of the HAMP is to provide drinking water that meets or exceeds USEPA's 10 parts per billion (ppb) maximum contaminant level arsenic standard. Water systems in the Tribe's First and Second Mesa regions have arsenic concentrations ranging from 15 ppb to 40 ppb. While the primary purpose of the HAMP is to provide arsenic compliant drinking water, additional benefits of the regional system include an increase in the quantity of water available and improved water system reliability, reducing the risk and occurrence of water outages.

Please refer to the attached Environmental Assessment (EA) for a complete description of the proposed project and the affected environment. Four alternatives and the no action alternative were considered in the EA. Revised Alternative A, the preferred alternative, consists of developing a new well field in the Turquoise Trail region north of First and Second Mesa, construction of a 260,000 gallon ground level water storage tank, and installation of 35 miles of 8" to 12" diameter pipeline to convey water to First and Second Mesa. Two or three wells would be drilled with maximum individual well pumping rates of 300 gpm each. The pipeline alignment to First Mesa would be routed to the southeast along Indian Route 8 and would end at the existing 500,000 gallon Polacca East Tank. The pipeline alignment to Second Mesa would be routed to the southwest. This pipeline would include a booster station, and a 110,000 gallon Upper Sipaulovi/Mishongovi storage tank or second booster station would be constructed to provide water pressure and storage for the villages. Arsenic treatment of existing wells in each of the villages was considered and rejected as a result of complex water chemistry with high pH and competing ions, high construction, operation and maintenance costs, complex compliance monitoring and required operator certification levels, and technical requirements for arsenic treatment systems.

The determination of potential environmental impacts has been conducted in accordance with the Department of Health and Human Services General Administrative Manual, Chapter 30, the IHS Environmental Review guidelines, dated January 2007 and the National Environmental Policy Act (NEPA) implementing regulations (40 CFR 1500-1508).

The project was not Categorically Excluded, as defined in 40 CFR 1508.4 and the IHS Federal Register notice of January 6, 1993 because the project is larger in scope than normal, there is potential for controversy, a portion of the pipeline crosses washes that flood frequently, and there are sensitive cultural resources and scenic values that must be considered and protected.

In accordance with NEPA, IHS has completed the attached EA, dated June 2014, to evaluate the environmental consequences of the four alternatives, along with the no action alternative. HAMP EA cooperating agencies include the Tribe, Bureau of Indian Affairs, Bureau of Reclamation, U.S. Department of Housing and Urban Development, U.S. Department of Agriculture – Rural Development, and U.S. Environmental Protection Agency. This EA incorporates relevant NEPA requirements and guidelines from these cooperating agencies.

As a result of the EA, as well as a scoping meeting and consultation with regulatory agencies, IHS has made a determination the action will not have a significant impact on the quality of the human environment.

The following supports The Finding of No Significant Impact:

The long-term beneficial impacts of the proposed construction and operation of the HAMP are positive for First and Second Mesa villages. The water system would provide improved water quality, meeting the arsenic drinking water standard, improved water system reliability and an increase in the quantity of water available.

The context and intensity of the following environmental impacts were considered. Local and interagency scoping and discussions at several public and Tribal Council meetings indicated widespread public support for construction of the HAMP.

Living Resources

Four biological reports, prepared by the Tribe's Department of Natural Resources staff, indicated the project would have no effect on federally listed species or critical habitat. The potential for adverse effects on threatened and endangered species and habitat was considered and IHS determined the preferred action would have no effect. Trees and shrubs will be cleared outside of the migratory bird nesting season, March 1 through August 30, and construction will not take place near active migratory bird nests. In accordance with the Hopi WEMP recommendations, no construction activity will be allowed during the golden eagle and red-tailed hawk nesting seasons, February 1 through July 31, in the vicinity of occupied eagle and hawk nests. To prevent raptor electrocutions, the electrical transmission line would have a 60-inch separation between conductors. For distribution lines and other electric facilities, avian-protective design and insulations features should be utilized as appropriate per guidance from the Avian Power Line Interaction Committee (2006).

Cultural Resources

Cultural resources surveys were conducted by a Hopi Cultural Preservation Office (HCPO) staff to determine if the project would impact potential National Register eligible historic properties. All alternatives have been discussed with village traditional leaders

who have taken an active role in selecting the alignment that will mitigate cultural impacts, such as rerouting pipelines to avoid traditional cultural properties (TCPs) and other National Register eligible sites. The IHS will schedule project construction activities in coordination with traditional leaders to avoid conflicts with ceremonies. Based on consultation with the Hopi Tribe and Hopi villages, Revised Alternative A would have no adverse impact on TCPs. Per the requirements of Section 106 of the National Historic Preservation Act, consultation was conducted with HCPO, who concurred with the proposed Revised Alternative A would have no adverse effect on historic properties.

In the event of an unanticipated discovery including the encounter of any previously unidentified or incorrectly identified cultural resource including, but not limited to, archaeological deposits, human remains, or places reported to be associated with the Native American religion beliefs and practices not considered in the cultural assessment, all operations in the area of the discovery will cease and the Hopi Cultural Preservation Office will be contacted. An assessment of the discovery will be made by the HCPO. If the discovery is deemed significant, the SHPO will be notified by IHS and HCPO and appropriate recordation will be prepared prior to any resumption of work in discovery area.

Air Quality

Construction impacts to air quality, in this air quality attainment area, resulting from construction activities will consist of emissions from gas and diesel engines in construction trucks and equipment, as well as dust associated with excavation. The construction contractor will implement standard dust control measures, such as watering of exposed dirt areas, sweeping, and limiting the area subject to excavation, and will comply with EPA air quality regulations. Long-term negative impacts to air quality are not anticipated.

Visual Impacts

The potential impact on scenic values was considered in the siting of the water storage tanks, booster stations and power lines, through consultation with village traditional leaders and HCPO. Lands disturbed for pipelines will be re-contoured to their original form and re-vegetated. Tanks and pump stations will be painted a tan or earth-tone color to help them blend into the landscape. Most transmission and distribution lines will be located along roadway corridors where the landscape has been modified.

Controversy

Villages, businesses, homeowners and other water users will need to fund operation and maintenance of the HAMP, which could be considered a financial burden. Separate water systems located in the villages would also need to pay for their operating costs. While this could create controversy, as some villages do not currently charge homeowners for water service and some other villages have very low monthly user charges, the public understands the need for safe water and have accepted these additional costs.

Noise

During the construction of the HAMP, noise would be produced by heavy equipment and other construction equipment, especially for work in and around villages. To minimize the impact construction noise would have on nearby residents; it is recommended that construction occur only during daytime hours during the week. Federal workplace standards for the operation of equipment will be complied with for the protection of workers and the public.

Public Review

The EA and Draft FONSI were made available to individuals, communities and agencies for a thirty day review period, ending October 13, 2014. Two public meetings were conducted at Hopi to review the EA, Preliminary Engineering Report, Strategic Plan and draft FONSI. Copies of the EA were mailed directly to agencies with regulatory authority or applicable environmental expertise to solicit comments. The Draft EA was provided to cooperating agencies for preliminary review in 2013 and comments have been incorporated into the EA. Copies of the documents were also available at Village and Tribal Offices. IHS took no administrative action on the above described project prior to expiration of the comment period and review of all comments received.

Finding

The FONSI is approved without substantive changes from the Draft FONSI it will not be recirculated for review, but will be available to any agency or individual upon request to CAPT Michael Welch, at the Phoenix Area IHS, 40 North Central Ave., Suite 720, Phoenix, AZ, 85004.

After review of the EA and all agency and public comments, IHS has determined construction and operation of the HAMP will have no significant and unmitigated environmental impacts, requiring the preparation of an Environmental Impact Statement.

Approved:

Date:



Michael Welch, R.S.
Associate Area Director, OEHE, PAIHS

